Amendments to the Claims:

Please amend claims 20, 21, 62, 63, 67, 69, 71, 73-74, 76, 78, and 80-82. Please cancel claims 22, 40-61, 68, 70, 75 and 79 without prejudice or disclaimer. This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1–19 (Cancelled).

20. (Currently amended) A method for the production of modified endosperm, which comprises the step of introducing a nucleic acid molecule into a plant, the nucleic acid molecule comprising one or more regulatory sequences directing expression in female germ line cells and a sequence whose transcription product comprises a partial or full-length *Arabidopsis MET1* sequence, wherein the introduced nucleic acid is effective for ~~reduces the degree of DNA methylation of nucleic acid in the plant by~~ down-regulating one or more DNA methylating enzymes present in the plant, whereby the degree of DNA methylation of nucleic acid in the plant is reduced as compared to a control plant.

21. (Currently amended) A method as claimed in claim 20 wherein the transcription product comprises an antisense nucleic acid.

22. (Cancelled)

23–61. (Cancelled).

62. (Currently amended) A method ~~as claimed in claim 21, wherein the~~ for the production of modified endosperm, which comprises the step of introducing a nucleic acid molecule into a plant, the nucleic acid molecule comprising one or more regulatory sequences directing expression in female germ line cells and a sequence whose transcription product comprises a partial or full-length ~~an antisense nucleic acid to a~~ *Z. mays* sequence orthologous

to *Arabidopsis* [[Met1,]] *MET1*, wherein the introduced nucleic acid is effective for down-regulating one or more DNA methylating enzymes present in the plant, whereby the degree of DNA methylation of nucleic acid in the plant is reduced as compared to a control plant.

63. (Currently amended) A method as claimed in claim [[21]] 62, wherein the transcription product comprises an antisense nucleic acid ~~to a *B. napus* sequence orthologous to Met1~~.

64. (Previously presented) A method as claimed in claim 20, wherein the plant is a dicotyledonous plant.

65. (Previously presented) A method as claimed in claim 20, wherein the transcription product down-regulates one DNA methylating enzyme.

66. (Previously presented) A method as claimed in claim 20, wherein the transcription product comprises a full or partial sense copy of a DNA methylating enzyme gene already present in the plant.

67. (Currently amended) A method as claimed in claim [[44] 66, wherein the sense copy is a partial sense copy.

68. (Cancelled)

69. (Currently amended) A method as claimed in claim [[44] 62, wherein the ~~DNA methylating enzyme is a *Z. mays* enzyme orthologous to *Arabidopsis* Met1~~ transcription product comprises a full or partial sense copy of a DNA methylating enzyme gene already present in the plant.

70. (Cancelled)

71. (Currently amended) A method as claimed in claim [[44] 66, wherein the plant is a dicotyledonous plant.

72. (Previously presented) A method as claimed in claim 20, wherein the transcription product comprises a ribozyme sequence.

73. (Currently amended) A method as claimed in claim [[50]] 72, wherein the transcription product comprises a ribozyme.

74. (Currently amended) A method as claimed in claim [[50]] 62, wherein the transcription product comprises a ribozyme ~~to a *Z. mays* sequence orthologous to Met1~~.

75. (Cancelled)

76. (Currently amended) A method as claimed in claim [[50]] 72, wherein the plant is a dicotyledonous plant.

77. (Previously presented) A method as claimed in claim 20, wherein the one or more regulatory sequences direct expression in female gametic cells.

78. (Currently amended) A method as claimed in claim [[55]] 77, wherein the transcription product comprises an antisense nucleic acid.

79. (Cancelled)

80. (Currently amended) A method as claimed in claim [[55]] 77, wherein the transcription product comprises a partial sense copy of a DNA methylating enzyme already in the plant.

81. (Currently amended) A method as claimed in claim [[55]] 77, wherein the plant is a dicotyledonous plant.

82. (Currently amended) A method as claimed in claim [[55]] 77, wherein the plant is a monocotyledonous plant.